

REMARKS

Claims 1-4, 6-7, 9-13, 20-23 and 25-27 are pending in the present application. Claim 1 has been amended to include the limitations of claim 5, and claim 20 has been amended to include the limitations of claim 24. Since the claims pending herein were previously pending, entry of this amendment is appropriate.

Claims 1-4 and 25 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Malba (U.S. Patent No. 5,834,162, hereinafter "Malba"). In addition, claims 5-7, 9-13, 20-25, and 27 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Malba in view of Glenn (U.S. Patent No. 6,518,659 B1, hereinafter "Glenn"). Applicant respectfully traverses these rejections.

Claim 5, as pending prior to this amendment, specifically recited that "the contact area on the first semiconductor substrate and the contact area on the second semiconductor substrate each extend from the first main surface to a second main surface." This limitation has been added to claim 1. Applicant respectfully submits that the references of record do not teach or suggest this limitation.

In finally rejecting this claim, the Office Action states "Malba and Glenn [sic] disclosed the contact areas on the first and the second semiconductor substrates each extend from a first main surface to a second main surface of the respective semiconductor substrate." Applicant respectfully disagrees with this assertion.

Malba provides no teaching of a contact area that extends from one main surface to another. Further, Glenn provides no teaching of a contact area arranged on a side surface of a semiconductor substrate. Applicant respectfully suggests that this combination of references does not teach or suggest the limitations of claim 1.

Glenn teaches leads 21 disposed on the outside of a package 10. See Figure 1; column 3, line 62. There is no teaching or suggestion that this lead 21 could be applied to an unpackaged semiconductor chip. In fact, the side contacts 17 of Malba would be rendered useless if used with a lead 21 as taught by Glenn. Simply, there is no teaching or suggestion that the package lead 21 could be in any way used with an unpackaged chip. It is therefore respectfully submitted that claim 1 is allowable over the references of record.

Claims 2-4, 6 and 26 depend from claim 1 and add further limitations. It is respectfully submitted that these dependent claims are allowable by reason of depending from an allowable claim as well as for adding new limitations.

Applicant respectfully submits that claim 7 is allowable as presently pending. In particular, claim 7 recites a third semiconductor substrate that includes a contact area arranged along a side surface that is in contact with a contact area arranged along a side surface of a second semiconductor substrate. Applicant respectfully submits that the references of record do not teach or suggest the limitations of claim 7.

The Office Action admits that Malba "does not clearly show" the claimed arrangement. In fact, Malba in no way shows the claimed arrangement. There is no teaching or suggestion that the side contacts 17 of different chips could somehow be connected together.

Further, it is not obvious to use package leads 21, as taught by Glenn, with the unpackaged semiconductor chips of Malba. One of ordinary skill in the art would not know to use such package leads with a chip. Certainly, neither reference provides any

such teaching. Therefore, it is respectfully submitted that claim 7 is allowable over the references of record.

Claims 9-13 and 27 depend from claim 7 and add further limitations. It is respectfully submitted that these dependent claims are allowable by reason of depending from an allowable claim as well as for adding new limitations.

For example, claim 27 specifically recites that "the first semiconductor substrate arranged in direct contact with the surface of the mount element, the second semiconductor substrate arranged in direct contact with the surface of the mount element, and the third semiconductor substrate arranged in direct contact with the second semiconductor substrate." Applicant respectfully submits that the references of record do not teach or suggest these limitations. In fact, the Office Action provides absolutely no rationale as to how this limitation can be taught by the references. *See* 37 C.F.R. § 1.104(c)(2).

Independent claim 20 has been amended to include the limitations of claim 24 and now specifically recites that "the contact areas on the first and second semiconductor substrates each extend from a first main surface to a second main surface of the respective semiconductor substrates." It is respectfully submitted that the references of record do not teach or suggest the limitations of claim 20.

As discussed above, neither Malba nor Glenn teach or suggest the use of external package leads with an unpackaged semiconductor chip. Therefore, it is respectfully submitted that claim 20 is allowable over the references of record.

Claims 21 -25 depend from claim 20 and add further limitations. It is respectfully submitted that these dependent claims are allowable by reason of depending from an allowable claim as well as for adding new limitations.

In view of the above, Applicant respectfully submits that this response complies with 37 C.F.R. § 1.116. Applicant further submits that the claims are in condition for allowance. No new matter has been added by this amendment. If the Examiner should have any questions, please contact Applicant's attorney at the number listed below. No fee is believed due in connection with this filing. However, in the event that there are any fees due, please charge the same, or credit any overpayment, to Deposit Account No. 50-1065.

Respectfully submitted,



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